CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

MEMORANDUM

TO: **John Robertus**

File #03-538.02
U.S. Navy, Naval Base Point Loma (NBPL)

FROM: **Paul J. Richter, WRCE**
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

DATE: **8 August 2002**

SUBJECT: **Response to comments regarding tentative Order No. R9-2002-0002.**

The Regional Board received comment letters from the Sierra Club, the U.S. Navy, a joint letter from San Diego BayKeeper and the Environmental Health Coalition, State Senator Dede Alpert, and U.S. Congresswoman Susan A. Davis. Brief paraphrases of the concerns listed in each letter and staff's response are provided below. Some of the concerns have been grouped into one comment. The original letters should be reviewed to be sure the reader understands the comment and to ensure that I have accurately summarized the comment.

a. Sierra Club, San Diego Chapter letter, dated July 22, 2002

a.1. Comment: For each of the ARCO ballast tanks the tentative Order should require the Navy to replace zinc anodes with aluminum anodes.

Response: The Fact Sheet notes that the ballast waters from the ARCO are defined by the *Uniform National Discharge Standards* (UNDS*) for Armed Forces Vessels* as a *clean ballast* and that the USEPA and the DOD are developing marine pollution control devises (MPCD) for the discharges from the ballast tanks. Accordingly, any requirement for the use of aluminum anodes in place of zinc anodes should be addressed to the UNDS program manager at:

Booz, Allen & Hamilton Inc.
8283 Greensboro Drive (HMLT 4078)
McLean, VA 22102
or e-mail: UNDS@bah.com.

The Regional Board will discuss with the Navy the possibility of using aluminum anodes in place of zinc anodes at the ARCO floating drydock.

a.2. Comment: Bio-assessment of the benthic community should be required in the sediment monitoring requirements.

Response: The tentative Order allows the scope of the sediment monitoring plan to develop as sediment information is collected. The Regional Board is evaluating clean-up standards for high metal concentrations in sediments at the National Steel and Shipbuilding Company shipyard and at the Southwest Marine shipyard. Upon review of the sediment plan or upon review of any sediment monitoring data, the Regional Board may request additional characterization or remedial actions from the Navy.

a.3. Comment: Require toxicity monitoring for 2 industrial storm water discharges rather than 1 industrial storm water discharge. Include the 1st storm event of the year as a required monitoring event for toxicity.

Response: It is not necessary to have toxicity monitoring for each storm or for the first storm event. The toxicity monitoring requirement is the same as the commercial shipyard toxicity monitoring frequencies. The industrial storm water monitoring requirement for toxicity is once per year. The Navy may sample the first storm event for toxicity because there may only be one storm event to produce enough discharge to gather enough sample. By sampling the first storm event the Navy may be able to sample a second storm event to achieve a survival rate greater than 90%, 50% of the time. An indication of the toxicity can be determined from the sampling requirements for the chemical concentrations in the industrial storm water discharges.

The industrial storm water monitoring requirement for chemical concentrations is a minimum of twice per year and includes the first two qualifying storm events of the wet season.

If copper or zinc concentrations are high, then the monitoring for copper and zinc is required for 2 more storm events. The monitoring frequency requirement for copper and zinc is greater than the frequency required of the commercial shipyards.

b. U.S. Navy letter, dated July 24, 2002

b.1. Comment: a. The 90% survivability toxicity standard is applied inconsistently to the regulated community without explanation or scientific justification. **b.** A sound scientific justification for any survivability toxicity standard has not been established.

Response: The survivability toxicity standard demonstrates compliance with the Basin Plan and the Federal Clean Water Act (CWA Section 101(a)(3))(Fact Sheet p. 34, pp. 36-40, & pp. 45-46). The 90% survivability is a reasonable measurement of compliance with the Basin Plan objective for toxicity. The toxicity objective in the Basin Plan reads as follows:

Water Quality Objectives for Toxicity:

All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.

The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with requirements specified in U.S. EPA, State Water Resources Control Board or other protocol authorized by the Regional Board. As a minimum, compliance with this objective as stated in the previous sentence shall be evaluated with a 96-hour acute bioassay.

In addition, effluent limits based upon acute bioassays of effluents will be prescribed where appropriate, additional numerical receiving water objectives for specific toxicants will be established as sufficient data become available, and source control of toxic substances will be encouraged.

A strict application of this objective would be zero tolerance for toxicity (90% survivability, 100% of the time for compliance). In keeping with the goal of eliminating toxicity in discharges to the Bay, one option could be to require toxicity monitoring for all discharges of industrial storm water runoff for all storm events. The tentative Order requires sampling of only one storm event. The Navy could be required to sample all storm events for toxicity.

The toxicity discharge standard (90% survival rate, 50% of the time) is consistent with the toxicity discharge standard for the commercial shipyards and the Navy Graving Dock along San Diego Bay.

The chemical concentrations in the industrial storm water discharges have been significant. The toxicity standard is used to evaluate the industrial storm water discharges and to prevent violations of the Basin Plan and CWA.

The toxicity standard in the tentative Order allows the Navy 2 years to achieve compliance before becoming an enforceable limit. The toxicity standard could have been applied straightaway.

The chemical concentrations in the industrial storm water discharges listed in the Fact Sheet for the SUBASE would not likely achieve a 90% survival rate. By including the toxicity requirements the Navy will need to develop administrative or engineering procedures to achieve a toxicity survivability standard rather than a chemical concentration standard.

The toxicity standard for the boat yards is different because the standard was set for boat yards not shipyards or ship repair and maintenance facilities.

b.2. Comment: Compliance with the 90% survivability toxic standard will require the collection and diversion of storm water discharges, which is not a feasible solution.

Response: The toxicity stand is a performance goal for 2 years prior to becoming a discharge specification. The Navy will need to evaluate methods to achieve the toxicity standard during the next 2 years. The Navy may have to collect and divert the industrial storm water discharges.

b.3. Comment: Non-industrial storm water discharges would violate the proposed toxicity standard.

Response: The industrial storm water from the SUBASE does contain high concentrations of copper and zinc. The toxicity standard is consistent with the standard applied to the commercial shipyards along San Diego Bay.

b.4. Comment: The Navy proposes establishing a toxicity standard based on sound science that can be applied consistently.

Response: The toxicity standard proposed by the Navy is typically used when a total maximum daily load (TMDL) is being developed. Any consideration for a numerical chemical limit based upon a TMDL would be applied after the application of National Pollutant Discharge Elimination System (NPDES) effluent limits. The toxicity standard is applied to the industrial storm water discharges to assure compliance with the Basin Plan and CWA policy.

If the water quality criteria of San Diego Bay are not achieved after the application of the NPDES permit limits; a TMDL may be developed pursuant to the concepts in the Technical Support Document (TSD).

b.5. Comment: The toxicity test methods should allow an alpha value equal to 0.01.

Response: The alpha value, i.e., the probability of committing a Type I error (a true null hypothesis is rejected), is usually prescribed by the test method used as being 0.05. The test methods used pursuant to the tentative Order are determined by the American Society of Testing and Materials (ASTM), the USEPA, or other authority that develops testing procedures. The alpha value should not be changed from the value of 0.05, which is recommended by the USEPA (pp. 97-100, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to the Freshwater and Marine Organisms, Fourth Edition, EPA/600/4-90/027, September 1991).

b.6. Comment: The monitoring of point source discharges for 2,3,7,8-TCDD congeners pursuant to the Implementation Policy should be specified for a minor discharge rather than a major discharge (i.e., the monitoring frequency be changed from three wet and dry seasons to one wet and dry season sampling event).

Response: Though the individual discharges from the Navy may be considered minor discharges, the Implementation Policy requires major industrial dischargers to monitor for three wet and dry seasons and does not allow for deviation.

b.7. Comment: The Navy has been conducting sediment monitoring and requests the removal of the sediment monitoring plan development. This would allow the Navy to provide better support to existing sediment monitoring programs.

Response: The sediment monitoring requirement only specifies the Navy develop a monitoring plan. The scope of the monitoring plan for the tentative Order may include the existing sediment monitoring programs.

The details of any monitoring program may be developed at a later date.

b.8. Comment: The diesel engine cooling water discharge temperature should not be specified in the tentative Order because an exception is allowed by the Thermal Plan.

Response: The application of a temperature limit for the diesel engine cooling water discharge is consistent with the Thermal Plan. If the Navy wants an exception to the Thermal Plan limit, the Thermal Plan allows the Navy to apply for such an exception. The Thermal Plan's exception process requires compliance with the Section 316(a) of the CWA, compliance with the California Environmental Quality Act (CEQA), and requires concurrence by the State Board. The exception process requires a 316(a) evaluation and, at a minimum, an initial study for CEQA.

b.9. Comment: The Navy requests to continue coverage under the current General Industrial Storm Water permit for July through September and that the monitoring and observation requirements of the tentative Order begin during the 2003-2004 wet weather seasons rather than this 2002-2003 wet weather season.

Response: We understand that the Navy would continue the monitoring requirements specified in the General Industrial Storm Water Permit for the 2002-2003 wet weather season and would therefore not need to renegotiate the contracts for storm water monitoring.

Such a change would remove the toxicity monitoring requirements in the tentative Order and would remove the additional chemical monitoring requirements in the tentative Order for the 2002-2003 wet weather season.

A complete change of the monitoring requirements is not recommended. Any change would need to be made by the Regional Board. The Regional Board may grant a change to the monitoring and reporting requirements for July through September.

b.10. Comment: The Navy requests that the storm water inspection requirements match the General Industrial Storm water permit.

Response: We understand that the Navy is requesting fewer visual inspections as currently required by the General Industrial Permit. The additional inspection requirements in the tentative Order should not be changed (Attachment D, p. 11). Visual inspections provide the Navy and the Regional Board with information regarding the

preparations and conditions at the industrial facilities. A renewal to the General Industrial Storm Water Permit is being developed and the draft renewal permit also includes the more frequent visual inspections. The visual inspection requirements should not be changed.

b.11. Comment: Should the Navy file a *notice of termination* for coverage under the General Industrial Storm Water Permit?

Response: Yes, the Navy should submit a notice of termination upon adoption of the tentative Order. An errata sheet was written to authorize the tentative Order to supercede the General Industrial Storm Water permit.

b.12. Comment: Should the Navy file a *notice of termination* for coverage under the General Utility Vault Permit?

Response: Yes, the Navy should submit a notice of termination upon adoption of the tentative Order. An errata sheet was written to authorize the tentative Order to supercede the General Utility Vault permit.

b.13. Comment: The tentative Order, monitoring and reporting program and the fact sheet had various spelling errors and typographic errors. The descriptions of some of the discharges in the Fact Sheet were incomplete.

Response: The spelling and typographic error in the tentative Order and monitoring and reporting program were changed as recommended for the agenda package. The recommended changes for various point source discharge descriptions were made to the Fact Sheet in the agenda package.

c. San Diego BayKeeper and Environmental Health Coalition letter, dated July 26, 2002

c.1. Comment: The tentative Order should document and list all radioactive discharges.

Response: Radioactive discharges are not subject to regulation by the Regional Board. The Navy and the Department of Energy have jurisdiction for discharges of radioactive material. The *Naval Nuclear Propulsion Program* has a quarterly monitoring program for

radioactive discharges. The United States Environmental Protection Agency (USEPA) has also conducted a separate, one-time monitoring program for radioactivity. The public is made aware of the radiological activity through the Department of Energy, the Navy, and the USEPA.

Additional information regarding the radioactive discharges is available in an attachment to the Fact Sheet for the tentative Order. Contact persons and organizations for information regarding radioactive discharges are identified in the reference documents listed in the attachment to the Fact Sheet.

c.2. Comments: The tentative Order should include requirements for the discharges that will be regulated pursuant to the *Uniform National Discharge Standards for Vessels of the Armed Forces* (UNDS). The UNDS standards do not yet exists, and once they are developed, they may not be adequate.

Response: The Regional Board should allow the UNDS process to proceed. The processes developed through the UNDS for the regulation of *Cooling Water Discharges, Thermal Plumes, Fresh Water Lay-up*, and *Underwater Ship Husbandry* should provide a comprehensive system to evaluate and regulate such discharges.

Additional information regarding the discharges identified by UNDS is available in an attachment to the Fact Sheet for the tentative Order. Contact persons and organizations are identified in the reference documents listed in the attachment to the Fact Sheet.

c.3. Comment: The toxicity requirements in the tentative Order should not be changed.

Response: We agree that the toxicity requirements in the tentative Order are adequate.

c.4. Comment: The pier facility used by the Scripps Institute of Oceanography should be issued a permit.

Response: Comment noted.

c.5. Comment: The tentative Order should include a prescribed period for the Navy to modify its SWPPP and BMP.

Response: The time required by the Navy to adjust its Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMP) are not specified in the tentative Order. The quarterly monitoring frequency will allow the Regional Board staff sufficient information to evaluate the progress of the SWPPP and BMP modifications. Staff can review each SWPPP and BMP modification when such requirements are necessary. Depending on the scope and magnitude of the changes, some modification may take some time, possibly longer than one month.

c.6. Comment: The tentative Order should require the Navy to review the classification of the high risk areas.

Response: The site map required in the SWPPP (p. 4, Attachment D) includes an identification of the high risk areas for the SUBASE. The SWPPP shall be revised if significant changes occur. Regional Board staff can evaluate the SWPPP.

c.7. Comment: It is necessary to have receiving water monitoring in the tentative Order.

Response: The tentative Order does require some monitoring of the receiving waters for priority pollutants for a reasonable potential analysis. After analyzing the priority pollutant data, the Regional Board may request additional monitoring. The point source discharges from the Navy facility are minimal.

The industrial storm water discharges are of concern. If the industrial storm water discharges are monitored and comply with the toxicity requirements then protection of the receiving water is provided.

d. Senator Dede Alpert letter, dated July 30, 2002

d.1. Comment: The Regional Board should postpone its August 14, 2002, hearing on the NBPL tentative Order. Technical staff should explore additional options with the Navy.

Response: This hearing has been rescheduled after a hearing on April 10, 2002. A workshop for the tentative Order was conducted on June 27, 2002. The Navy, the Environmental Health Coalition, the Sierra Club, and the San Diego BayKeeper, attended the workshop. The Navy has proposed an alternative toxicity program that may be conducted

when and if a TMDL is developed for discharges to the respective portion of the Bay.

e. Member of Congress, Susan A. Davis letter, dated August 5, 2002

e.1. Comment: The Regional Board should work with the Navy to develop a permitting standard that will allow the Navy to carry out its mission. How will the Navy be able to divert industrial storm water to the City of San Diego sanitary sewer system?

Response: The toxicity discharge standard (90% survival rate, 50% of the time) is consistent with the toxicity discharge standard for the commercial shipyards and the Navy Graving Dock along San Diego Bay. The intent of the toxicity requirements are to comply with the goals of the Basin Plan and the Federal Clean Water Act (CWA Section 101(a)(3)) for eliminating toxic discharges in toxic amounts (Fact Sheet p. 34, pp. 36-40, & pp. 45-46).

The chemical concentrations in the industrial storm water discharges have been significant. The toxicity standard is used to evaluate the industrial storm water discharges and to prevent violations of the Basin Plan and CWA.

The toxicity standard in the tentative Order allows the Navy 2 years to achieve compliance before becoming an enforceable limit. The Navy and the City will need to negotiate the conditions for any diversion of the industrial storm water to the sanitary sewer system.